



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Brenda M. Ogle et al.  
Serial No. : 10/554,122  
Filed : October 21, 2005  
Title : METHODS FOR ASSESSING BIOLOGIC DIVERSITY

Art Unit : 1637  
Examiner : Unknown  
Conf. No. : 4639

**Mail Stop Amendment**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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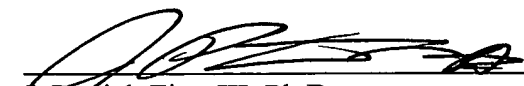
The following correspondence relating to this application is enclosed for filing:

1. Information Disclosure Statement (1 page);
2. Form PTO-1449 (2 pages);
3. Copies of Cited References (27 references); and
4. A Return Postcard.

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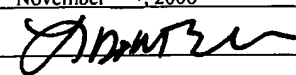
  
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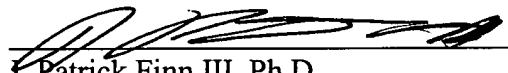
INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

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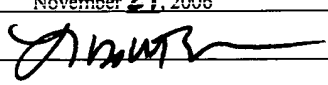
  
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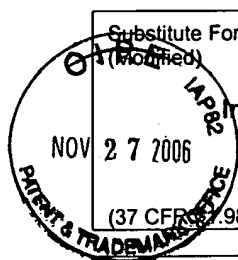
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Substitute Form PTO-1449

U.S. Department of Commerce  
Patent and Trademark Office

Attorney's Docket No.

07039-463US1

Application No.

10/554,122

**Information Disclosure Statement****by Applicant**

(Use several sheets if necessary)

(37 CFR 1.98(b))

Applicant

Brenda M. Ogle et al.

Filing Date

October 21, 2005

Group Art Unit

1637

**U.S. Patent Documents**

| Examiner Initial | Desig. ID | Document Number | Publication Date | Patentee         | Class | Subclass | Filing Date If Appropriate |
|------------------|-----------|-----------------|------------------|------------------|-------|----------|----------------------------|
|                  | AA        | 4,683,195       | 07/28/87         | Mullis et al.    |       |          |                            |
|                  | AB        | 4,683,202       | 07/28/87         | Mullis           |       |          |                            |
|                  | AC        | 4,800,159       | 01/24/89         | Mullis et al.    |       |          |                            |
|                  | AD        | 4,965,188       | 10/23/90         | Mullis et al.    |       |          |                            |
|                  | AE        | 5,445,934       | 08/29/95         | Fodor et al.     |       |          |                            |
|                  | AF        | 5,451,683       | 09/19/95         | Barrett et al.   |       |          |                            |
|                  | AG        | 5,635,354       | 06/03/97         | Kourilsky et al. |       |          |                            |
|                  | AH        | 5,744,305       | 04/28/98         | Fodor et al.     |       |          |                            |
|                  | AI        | 5,837,447       | 11/17/98         | Gorski           |       |          |                            |
|                  | AJ        | 6,087,096       | 07/11/00         | Dau et al.       |       |          |                            |

**Foreign Patent Documents or Published Foreign Patent Applications**

| Examiner Initial | Desig. ID | Document Number | Publication Date | Country or Patent Office | Class | Subclass | Translation |    |
|------------------|-----------|-----------------|------------------|--------------------------|-------|----------|-------------|----|
|                  |           |                 |                  |                          |       |          | Yes         | No |
|                  | AK        | WO 92/09615     | 06/11/92         | WIPO                     |       |          |             |    |
|                  | AL        | WO 97/45554     | 12/04/97         | WIPO                     |       |          |             |    |
|                  | AM        | WO 98/08857     | 03/05/98         | WIPO                     |       |          |             |    |
|                  | AN        | WO 98/20019     | 05/14/98         | WIPO                     |       |          |             |    |

**Other Documents (include Author, Title, Date, and Place of Publication)**

| Examiner Initial | Desig. ID | Document   |
|------------------|-----------|--|
|                  | AO        | Arstila et al., "A Direct Estimate of the Human $\alpha\beta$ T Cell Receptor Diversity," <u>Science</u> , 1999, 286:958-961   |
|                  | AP        | Cascalho et al., " $V_H$ Gene Replacement in Hyperselected B Cells of the Quasimonoclonal Mouse," <u>J. Immunol.</u> , 1997, 159:5795-5801   |
|                  | AQ        | Cascalho et al., "A Quasi-Monoclonal Mouse," <u>Science</u> , 1996, 272:1649-1652  |
|                  | AR        | Chen et al., "Immunoglobulin gene rearrangement in B cell deficient mice generated by targeted deletion of the $J_H$ locus," <u>Int. Immunol.</u> , 1993, 5(6):647-656   |
|                  | AS        | Clemente et al., "Immunohistochemical Analysis of the T-Cell Receptor $\beta$ -Chain Variable Regions Expressed by T Lymphocytes Infiltrating Primary Human Melanoma," <u>Lab. Invest.</u> , 1998, 78(5):619-627 |
|                  | AT        | Correia-Neves et al., "The Shaping of the T Cell Repertoire," <u>Immunity</u> , 2001, 14:21-32   |

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

|   |  |                                       |                               |
|---|--|---------------------------------------|-------------------------------|
| Substitute Form PTO-1449<br>(Modified)  | U.S. Department of Commerce<br>Patent and Trademark Office | Attorney's Docket No.<br>07039-463US1 | Application No.<br>10/554,122 |
| <b>Information Disclosure Statement<br/>by Applicant</b><br>(Use several sheets if necessary) |  | Applicant<br>Brenda M. Ogle et al.    |                               |
|   |  | Filing Date<br>October 21, 2005       | Group Art Unit<br>1637        |
| (37 CFR §1.98(b))   |  |                                       |                               |

| Other Documents (include Author, Title, Date, and Place of Publication) |           |   |
|---|-----------|---|
| Examiner Initial  | Desig. ID | Document  |
|   | AU        | Delassus et al., "PCR-based analysis of the murine immunoglobulin heavy-chain repertoire," <u>J. Immunol. Meth.</u> , 1995, 184:219-229   |
|   | AV        | "PerCP-CY5.5-Conjugated Rat Anti--Mouse CD19 Monoclonal Antibody," BD Biosciences Pharmingen Technical Data Sheet, 2002, BD Biosciences, 2 pages  |
|   | AW        | "BioArray™ HighYield™ RNA Transcript Labeling Kit (T7)," Technical Data Sheet, Enzo Life Sciences, Inc., 1999, 2 pages  |
|   | AX        | "CD19 (SJ25C1)," Data Sheet, 2002, BD Biosciences, 2 pages  |
|   | AY        | Farci et al., "The Outcome of Acute Hepatitis C Predicted by the Evolution of the Viral Quasispecies," <u>Science</u> , 2000, 288:339-344   |
|   | AZ        | Hori et al., "A new statistical method for quantitative analyses: application to the precise quantification of T cell receptor repertoires," <u>J. Immunol. Meth.</u> , 2002, 268: 159-170  |
|   | AAA       | Keshavarzi et al., "The Possibility of B-Cell-Dependent T-Cell Development," <u>Scand. J. Immunol.</u> , 2003, 57:446-452   |
|   | ABB       | Langerak et al., "Molecular and flow cytometric analysis of the V $\beta$ repertoire for clonality assessment in mature TCR $\alpha\beta$ T-cell proliferations," <u>Blood</u> , 2001, 98:165-173                                       |
|   | ACC       | McHeyzer-Williams et al., "Evolution of Antigen-specific T Cell Receptors In Vivo: Preimmune and Antigen-driven Selection of Preferred Complementarity-determining Region 3 (CDR3) Motifs," <u>J. Exp. Med.</u> , 1999, 11(7):1823-1837 |
|   | ADD       | Murata et al., "T Cell Receptor Repertoire of T Cells in the Kidneys of Patients With Lupus Nephritis," <u>Arthritis Rheum.</u> , 2002, 46(8):2141-2147   |
|   | AEE       | Pannetier et al., "T-cell repertoire diversity and clonal expansions in normal and clinical samples," <u>Immunol. Today</u> , 1995, 16(4):176-181   |
|   | AFF       | Pannetier et al., "The sizes of the CDR3 hypervariable regions of the murine T-cell receptor $\beta$ chains vary as a function of the recombined germ-line segments," <u>Proc. Natl. Acad. Sci. USA</u> , 1993, 90:4319-4323            |
|   | AGG       | Sheehan and Brodeur, "Molecular cloning of the primary IgH repertoire: a quantitative analysis of V <sub>H</sub> gene usage in adult mice," <u>Embo. J.</u> , 1989, 8(8):2313-2320  |
|   | AHH       | Silins et al., "Asymptomatic primary Epstein-Barr virus infection occurs in the absence of blood T-cell repertoire perturbations despite high levels of systemic viral load," <u>Blood</u> , 2001, 98(13):3739-3744                     |
|   | AII       | Slonim, "From patterns to pathways: gene expression data analysis comes of age," <u>Nat. Genet.</u> , 2002, 32(Suppl.):502-508  |
|   | AJJ       | Tibshirani et al., "Diagnosis of multiple cancer types by shrunken centroids of gene expression," <u>Proc. Natl. Acad. Sci. USA</u> , 2002, 99(10):6567-6572  |
|   | AKK       | Wagner et al., "Perturbation of the T cell repertoire in rheumatoid arthritis," <u>Proc. Natl. Acad. Sci. USA</u> , 1998, 95:14447-14452  |

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